Kellogg looks to heat schools with wood

Faced with high gas bills, district to ask voters about biomass burner

James Hagengruber Staff writer September 27, 2005

KELLOGG, Idaho – The grandiose mountain scenery has helped lure new teachers to this cash-strapped school district. Now, the thick forests that cover these mountains could soon be used to heat the schools and protect the district from budget-blowing energy price increases.

If voters approve, the Kellogg School District will soon begin heating some of its buildings with wood chips and spindly trees. Superintendent Greg Godwin said it didn't seem to make sense to write checks to Avista for up to \$16,000 a month for natural gas while being surrounded by so much potential fuel.



Kellogg High School students cheer during an assembly Monday morning after hearing the district received \$381,000 for the district's biomass heating program. (Kathy Plonka/The Spokesman-Review)

"When we see each fall the slash piles burning and the smoke covering the Silver Valley, if we can utilize that for the schools, that would certainly be a plus for the community," Godwin said.

Other schools across the Northwest are watching Kellogg carefully, said David Naccarato, who works for the international technology company Siemens, which is designing the biomass boiler system for the district. "I just got back from Eastern Oregon – they all want to know about Kellogg's project," he said.

A similar system is already up and running at the school in Darby, Mont., and has cut the district's heating bill by about 70 percent. The Council School District near McCall, Idaho, recently became the first in the state to switch to biomass heat, Naccarato said. On Friday, the school will fire up its new furnace, which runs on wood chips. The district expected to pay about \$30 per ton for the wood chips, but has already received a large amount of free fuel. Many landowners have donated branches, slash piles and spindly trees from forest thinning projects in the area, Naccarato said. The wood would otherwise simply be piled and burned or allowed to rot.

"We've not had any problem getting fuel," Naccarato said. "There's more than enough. ... In fact, we've been told we're the Saudi Arabia of biomass."

Actually, there might be too much fuel in the Silver Valley, said Randy Swick, district ranger with the U.S. Forest Service. The agency has numerous forest thinning projects planned for federal lands immediately surrounding communities here, including large projects in the Two Mile and Placer creek drainages. Being able to sell the brush – even for a modest profit – would only add more financial incentive for logging firms interested in competing for the projects, Swick said.

The Kellogg biomass system would burn about 600 tons of wood chips each year. For now, only the middle school, administration building and possibly one elementary school would be hooked up to the hot-water boiler system, Godwin said. But other businesses and organizations in the

community are in discussions now with the district to possibly connect to the system and purchase heat from the school.

The project is bundled inside a \$9.5 million bond request going to voters on Nov. 1. The bond will also pay for a variety of improvements at the schools, many of them designed to boost energy efficiency, Godwin said. Voters will be asked to repay only \$5.4 million on the bond, with the rest coming from grants, subsidies and a \$3.3 million energy cost savings being guaranteed by Siemens over the course of the 20-year bond.

The owner of a \$150,000 house would pay about \$52 more in taxes each year to fund the bond, according to figures provided by Godwin. On Monday, the school received a \$380,000 grant from the Fuels for Schools program of the U.S. Forest Service and the Idaho Department of Lands. The grant will be forfeited if voters reject the bond, Godwin said.

Convincing the required super-majority of voters to approve the project might not be easy, but Godwin said the energy cost savings are dramatic. The district currently uses natural gas, which costs about \$8 for a million British thermal units worth of energy. The same amount of heat from biomass would cost between \$2 and \$3.

With the price of natural gas going up another 25 percent, Godwin said he can't help but cringe a bit every time the schools' furnaces kick on – especially with so much potential heat growing on the nearby slopes.